

June 23, 2004

Mr. Karl W. Singer
Chief Nuclear Officer and
Executive Vice President
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2 AND 3 LICENSE RENEWAL
APPLICATION (TAC NOS. MC1704, MC1705 AND MC1706)

Dear Mr. Singer:

By letter dated December 31, 2003, Tennessee Valley Authority (TVA) submitted an application pursuant to 10 CFR Part 54, to renew the operating licenses for the Browns Ferry Nuclear Plant, Units 1, 2 and 3, for review by the U.S. Nuclear Regulatory Commission (NRC). The NRC staff is reviewing the information contained in the license renewal application (LRA) and has identified areas where additional information is needed to complete the review. Those areas are stated in the enclosed requests for additional information (RAIs), specifically from Section 3.5, related to the lay-up effects of Browns Ferry Unit 1 structures and components supports.

Based on discussions with Mr. Gary Adkins of your staff, a mutually agreeable date for your response to the RAIs is within 30 days of the date of this letter. If you have any questions regarding this letter or if circumstances result in your need to revise the response date, please contact me at (301) 415-1594 or by e-mail at yks@nrc.gov

Sincerely,

/RA/

Yaira K. Diaz Sanabria, Project Manager
License Renewal Section A
License Renewal and Environmental Impacts Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket Nos.: 50-259, 50-260 and 50-296

Enclosure: As stated

cc w/encl: See next page

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Accession no. ML041760076

DISTRIBUTION: See next page

*Input provided by memo

Document Name: C:\ORPCheckout\FileNET\ML041760076.wpd

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**REQUEST FOR ADDITIONAL INFORMATION (RAI) RELATED TO THE LAY-UP EFFECTS
OF BROWNS FERRY UNIT 1 STRUCTURES AND COMPONENT SUPPORTS
BROWNS FERRY NUCLEAR PLANT LICENSE RENEWAL APPLICATION
CIVIL AND ENGINEERING MECHANICS SECTION**

RAI 3.5-1

Browns Ferry Nuclear Plant (BFN) document titled, "Evaluation of the BFN Unit 1 Lay-Up and Preservation Program," including Tables 1 through 4, does not provide information related to BFN's evaluation of the Unit 1 spent fuel storage system lay-up effects. Please describe the method adopted in assessing the Unit 1 spent fuel storage system related lay-up effects. Also provide a discussion of the applicable spent fuel pool environments (any delta change in pool water chemistry, ambient humidity and temperature, etc.), results of past periodic inspections of the spent fuel pool structural components and pool liners, any observed pool leakages or degraded conditions, and corrective actions taken to support BFN's conclusion that no lay-up effect is applicable to Unit 1 spent fuel storage system.

RAI 3.5-2

Please describe the approach used in evaluating the Unit 1 structures and component supports related lay-up effects. Provide a discussion of the environments applicable to Unit 1 structures and component supports (e.g., any exposure to aggressive chemicals or ponding of water, significant change in ambient humidity and temperature, etc.), results of past periodic inspections of the structures and component supports, any observed degraded conditions, and corrective actions taken to support BFN's conclusion that no lay-up effect is applicable to Unit 1 structures and component supports that require an Aging Management Review (AMR).

RAI 3.5-3

When the plant is operating, the containment drywell, torus, and connecting vent assemblies are subjected to relatively inert environment, and all the requirements related to their inspections, and leak-rate testing are applicable. These requirements ensure the leak tight, and structural integrity of these components. Also, the industry operating experience problems, as reflected in NRC's Generic Letters, Information Notices, and other industry published event reports are considered as applicable. These activities may or may not have been considered for Unit 1 during its long lay-up. In this context, the applicant is requested to provide information that would describe the benchmark condition of the containment pressure boundary related components prior to restart of the Unit, and actions that will be taken prior to the extended period of operation. The relevant regulatory requirements would be: 10 CFR 50.55a, and Appendix J of 10 CFR 50. The relevant Generic Letters would be: GL 87-05, GL 89-16, and GL 98-05. The relevant Information Notices would be: IN 86-99, IN 88-82, IN 89-06, IN 89-79, and IN 92-20.

Enclosure

Tennessee Valley Authority

BROWNS FERRY NUCLEAR PLANT

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